hence it is inconceivable that they should go wrong on *Saturn*. Only the last objection, therefore, remains—a personal one—defective vision. This, if it has weight in this particular case, would also apply to many who are reckoned as highly-skilled observers. I may especially signalise M. Trouvelot and Dr. Terby. The former, in a valuable paper on *Saturn* (*Comptes rendus*, t. xcviii. p. 968), sums up the results of his own observations with the remark :—"*Les anneaux de cette planète, loin d'être stables, sont, au contraire, essentiellement variables et subissent des changements continuels.*" Since this was written, in 1884, much additional evidence has been forthcoming to support its truth. The existence of *masses sombres* on ring C was announced last year by Dr. Terby, and of indentations on its inner edge by myself; while equally remarkable appearances were recorded by MM. Stroobant and Stuyvaert with the 15-inch equatorial of the Brussels Observatory. This year Dr. Terby has again seen abnormal features. They have also been noted by Major Watson, who has observed dark patches on both ansæ and a serrated edge to ring C, with his fine 13-inch With mirror, at Newbridge, Ireland; by Rev. P. H. Kempthorne, M.A., of Wellington College, who has seen both spots and indentations in connection with C, with an $8\frac{1}{2}$-inch With ; and also by M. Gaudibert with an $8\frac{1}{2}$-inch reflector, at Vaison, Vaucluse.

It is perhaps noteworthy that those, with sufficient optical means, who do *not* see them, are more or less desultory observers of the planet, while those just mentioned examined it on every available opportunity. Continuous observation, night after night, doubtless tends to educate the eye, so that it soon becomes so familiar with the object scrutinised, that delicate features, which are either only doubtfully glimpsed or not seen at all by the occasional gazer, are readily detected whenever definition permits.

No telescope of the largest type has of late, so far as I know, been brought to bear upon the rings of *Saturn*. It is to be hoped that this will be done before they become too unfavourably placed for the detection of abnormal details.

Kempston, Beds :
    1888, *May* 31.

Observations of Sappho (80). By Professor C. H. F. Peters.

On account of the state of the weather I have not succeeded in obtaining more than the following observations. They are made with the filar micrometer of the 13-inch refractor, power 270, bright wires in dark field. The differences between star and planet have been corrected for refraction.

H. C. Mean Time.			Δα.	Δδ.	No. comp.	App. α.		Log. f.p.	App. δ.		Log. f.p.	Comp. *
h	m	s	m s	° ' "		h m s			° ' "			
1888, April 3	9	8 44	+0 55·86	+3 57·0	10	13 28	23·30	$9·5447n$	−13 36	21·6	0·8311	a
	4	10 43 35	+3 23·48	−2 44·2	12	27	25·33	$9·3057n$	13 28	9·9	0·8566	b
	6	12 23 57	−1 19·90	+1 43·4	15	25	32·39	7·5985	13 11	51·0	0·8644	c
	8	12 44 15	−1 37·01	−3 11·6	11	23	41·03	8·7924	12 55	32·8	0·8628	d

The positions of the comparison stars for 1888·0 are adopted as follows:

	h m s	° ' "	
a	13 27 26·18	−13 40 13·9	(Red. to app. place +1s·26; −4''·8.) Mean of
	26·06	14·8	W. 13h·422, incl. syst. corr. −0s·01; +1''·2.
	26·31	13·0	Sant. (IV.) 1244, incl. syst. corr. +0s·13; +0''·5.
b	13 24 0·57	−13 25 20·7	(Red. +1s·27; −5''·0.) Mean of
	0·59	20·8	W. 13h·356, incl. syst. corr. −0s·01; +1''·2.
	0·56	22·2	Lam. 1326, incl. syst. corr. +0s·05; +0''·7.
	0·55	19·0	Sant. (IV.) 1241, incl. syst. corr. +0s·13; +0''·5.
c_i	13 26 51·01	−13 13 29·3	(Red. +1s·28; −5''·0.) Mean by weight of
	51·06	31·8	w. 1, W. 13h·412, incl. syst. corr. −0s·01; +1''·2.
	51·10	28·8	w. 2, Altona, A. N. vol. xxxiv. (Kam, 2479.)
	50·90	28·6	w. 2, Sant. (IV.) 1243, incl. syst. corr. +0s·13; +0''·5.
d	13 25 16·75	−12 52 16·0	Cordoba Gen. Cat. 18396. (Red. to app. place +1s·29; −5''·2.)

For this last star we find the following older determinations (syst. corr. not included):

	h	m	s	°	′	″
LL. 24990	13	25	17·56	−12	52	11·6
W. 13ʰ·378			17·45			13·8
Lam. 1328			16·74			14·9
Sant. (III.) 1550			16·98			17·0

which perhaps indicate a slight proper motion.

On April 6 I have used a star different from the one suggested by Mr. Bryant, since the distance in declination of DM.−12°·3834 (in *Monthly Notices* xlviii. p. 96, the minute of R.A. should be 26^m instead of 25^m) from the planet became inconveniently large for our meridian.

The comparison of the observations with Mr. Bryant's ephemeris, employing the annexed parallaxes, gives the following corrections O−C:

	Parallax.		Corr. Δα.	Corr. Δδ.
	s	″	s	″
April 3	−0·21	+4·0	+6·86	−29·5
4	−0·12	+4·2	6·44	31·1
6	0·00	+4·3	6·69	32·8
8	+0·04	+4·3	6·74	33·9

Litchfield Observatory of Hamilton College, Clinton, N.Y.:
1888, May 8.

Observations of Comet a 1888 (Sawerthal), made at the Royal Observatory, Greenwich.

(Communicated by the Astronomer Royal.)

The observations were made with the East or Sheepshanks Equatorial, aperture 6·7 inches, by taking transits over two cross wires at right angles to each other, and each inclined 45° to the parallel of declination.

Comet a 1888 (Sawerthal).

Greenwich Mean Solar Time	Observer	☄−★ R.A.	Corr. for Par. and Refraction in R.A.	☄−★ N.P.D.	Corr. for Par. and Refraction in N.P.D.	No. of Comp.	Apparent R.A.	Apparent N.P.D.	Comp. Star
1888 d h m s		m s	s	′ ″	″		h m s	° ′ ″	
May 11 14 30 1	H. T.	−1 15·22	−0·30	+ 8 12·7	− 3·0	6	23 48 25·58	57 52 13·4	a
12 13 45 29	T.	−0 36·39	−0·30	+ 1 8·1	− 3·6	9	23 50 25·31	57 26 15·4	b
13 58 11		+0 11·25	−0·30	+10 41·0	− 2·8	2	…	…	c
13 13 17 10	H. T.	+2 3·35	−0·30	− 7 48·0	− 5·1	4	23 52 28·55	57 0 27·3	d
13 18 22		+3 49·12	−0·32	− 1 23·6	− 4·1	5	23 52 30·10	57 0 29·3	e
13 28 27		−1 15·20	−0·37	+ 6 16·4	− 3·1	3	23 52 31·03	57 0 12·9	f
15 13 28 56	H. T.	−2 21·50	−0·30	+11 8·1	− 3·0	3	23 56 35·90	56 9 28·0	g
18 12 29 10	H. T.	−1 16·48	−0·30	− 0 22·3	− 4·1	6	…	…	h
23 12 24 12	T.	+0 7·25	−0·30	− 2 24·3	− 4·6	8	…	…	i
31 12 44 43	H. T.	+1 14·63	−0·30	+ 1 34·5	− 3·2	4	0 25 41·23	50 16 42·6	j
12 48 34		+1 7·93	−0·30	− 5 59·7	− 3·8	6	…	…	k
12 56 17		−1 48·90	−0·30	−14 17·6	− 4·3	2	0 25 39·90	50 16 35·5	l
June 3 13 27 45	H. T.	+1 29·10	−0·30	+ 4 14·7	− 2·6	1	0 30 26·90	49 19 9·0	m
6 11 37 2	H. T.	−0 25·92	−0·20	+ 0 9·5	− 3·6	6	…	…	n